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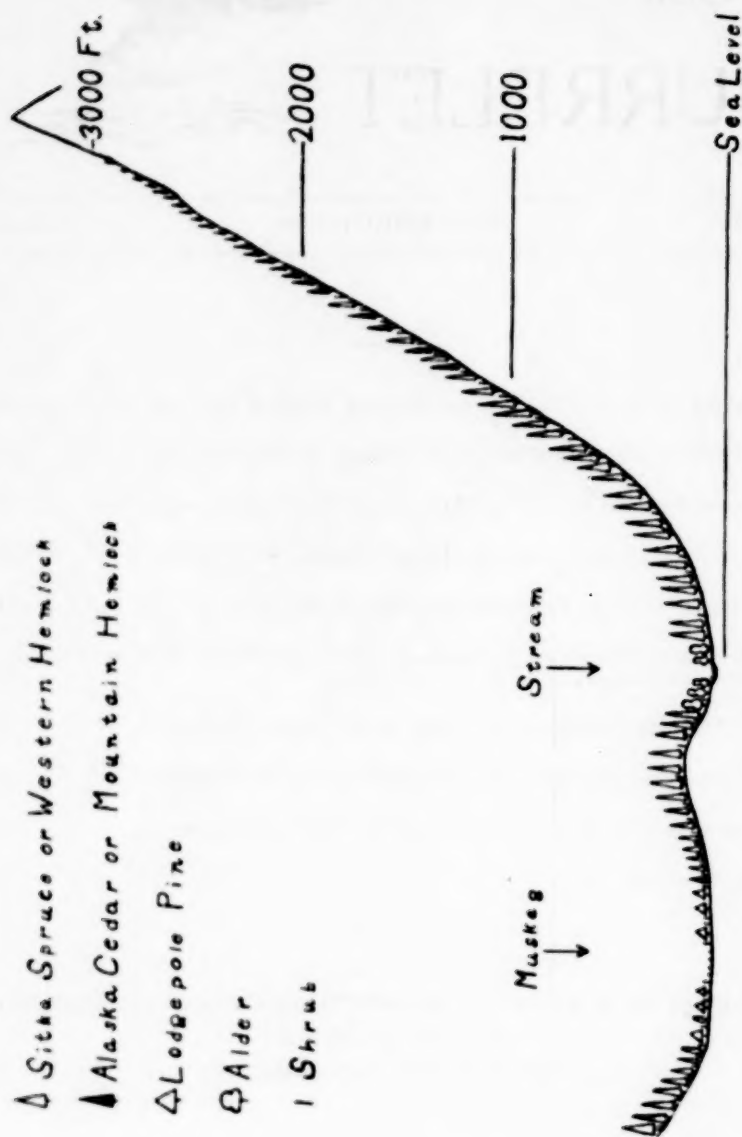


Fig. 1. Typical profile of topography and vegetation in southeastern Alaska.

ALTITUDINAL ZONATION OF BIRDS IN SOUTHEASTERN ALASKA

J. DAN WEBSTER

It is hoped that controversy among proponents of the various theories of ecology, or, rather, the media through which ecology is expressed, may be avoided in the present paper. All theories recognize that in the mountainous terrain along the Pacific Coast, important biotic divisions are delimited by altitudinal contour lines, subject to local deviation by such factors as prevailing winds, bodies of water, and glaciers. I will limit this paper to such ecologic facts as I have observed, supplemented very briefly by the observations of others for localities which I have not visited. Actually, the only thorough ecologic observations from higher altitudes in this region (except in Glacier Bay) found in the literature were those of Osgood (1900 and 1901). My own field experience in southeastern Alaska consists of boyhood, plus six months in 1940 at Sitka and five months in 1946 near Wrangell, together with extensive travel of a casual nature. Mammals are infrequently mentioned herein. This reflects the almost complete lack of information available in the literature on the distribution of small mammals above the beaches of this region, as well as the limitations of my own work.

I refer to southeastern Alaska as that portion of the territory south of Yakutat Bay. Such a boundary corresponds to the boundaries of Alaska's First Judicial District and Tongass National Forest, except that the latter does not include certain small areas, such as Glacier Bay National Monument. Similar ecologic conditions prevail in the Queen Charlotte Islands and on Dundas and Porcher Islands, in northern British Columbia (See Osgood, 1901; Brooks, 1923; Brooks and Swarth, 1925; Munro and Cowan, 1947).

CANADIAN ZONE. SEA LEVEL TO 1,500 FEET

The bulk of southeastern Alaska is given over to dense coniferous forests (Pacific Coast Forest, or Moist Coniferous Forest). Climax communities consist of Sitka spruce and western hemlock 40 to 120 feet tall, with a little red cedar (*Thuja plicata*) on the more southerly islands at sea level. Underbrush varies from fairly light to rather heavy in density; it consists of black twinberry (*Lonicera involucrata*), western hemlock (*Tsuga heterophylla*), and Sitka spruce (*Picea sitchensis*) saplings, with sometimes a little red huckleberry (*Vaccinium parvifolium*), salmonberry (*Rubus spectabilis*), salal (*Gaultheria shallon*), or Oregon yew (*Taxus brevifolia*) (The last two in the extreme south only). The floor is mossy, and very irregular because of numerous fallen logs. The common birds in the high tree tops or shady depths of these climax forests are: blue grouse (*Dendragapus obscurus*), Steller jay (*Cyanocitta stelleri*), chestnut-backed chickadee (*Parus rufescens*), winter wren (*Troglodytes troglodytes*), varied thrush (*Ixoreus naevius*), golden-crowned kinglet (*Regulus satrapa*), pine siskin (*Spinus pinus*), and red cross-bill (*Loxia curvirostra*). All eight of these species are permanent residents, although three of them (winter wren, varied thrush, and pine siskin) are much more common

in summer than in winter. Three other common, large, permanent-resident species, the northwestern crow (*Corvus caurinus*), raven (*Corvus corax*), and bald eagle (*Haliaeetus leucocephalus*), forage chiefly along the beaches, but nest in climax forest. Two less common, but generally distributed species, the Townsend warbler (*Dendroica townsendi*) and the brown creeper (*Certhia familiaris*), are confined to the climax forest. The creeper is a permanent resident, although more common in summer than in winter (Cf. Osgood, 1901; Swarth, 1922; Heintzelman, 1949).

Sub-climax communities in rocky soil consist principally of thickets of red alder (*Alnus rubra*), Sitka alder (*Alnus sinuata*), Oregon crabapple (*Malus diversifolia*), red elder (*Sambucus pubens*), and salmonberry (*Rubus spectabilis*). These thickets are found along streams, on landslides, and along most beaches. The commonest summer birds are: rufous hummingbird (*Selasphorus rufus*), western flycatcher (*Empidonax difficilis*), American robin (*Turdus migratorius*), hermit thrush (*Hylocichla guttata*), russet olive-backed thrush (*Hylocichla ustulata*), orange-crowned (lutescent) warbler (*Vermivora celata*), yellow warbler (*Dendroica petechia*), fox sparrow (*Passerella iliaca*), and song sparrow (*Melospiza melodia*). Of these, the western flycatcher and hermit thrush are usually found at the edge of the coniferous forest.

Successive seral stages in wet, boggy soil consist of:

1st. Open muskegs with much peat moss, numerous small shallow pools, and such small shrubs as crowberry (*Empetrum nigrum*), bog laurel (*Kalmia latifolia*), and cranberry (*Vaccinium oxycoccus*).

2nd. Individuals, then clumps, of lodgepole pines (*Pinus contorta*), and, in smaller numbers, scrubby Alaska cedars (*Chamaecyparis nootkatensis*), together with various blueberries and huckleberries (*Vaccinium parvifolium*, *V. caespitosum*, *V. membranaceum*, and *V. ovalifolium*).

3rd. Western hemlock with a heavy undergrowth of salmonberry, black twinberry, devil's club (*Oplopanax horridus*), and the various blueberries and huckleberries, and false azalea (*Menziesia ferruginea*).

4th. Climax forest.

There are no open-country birds on the muskegs, nor even any common low-shrub birds. Occasionally there are small, very wet glades grown to grasses and sedges instead of shrubs or trees. Here the Forbush Lincoln sparrow (*Melospiza lincolni*) occurs sparsely. The common summer birds of the shrubs and small trees are: yellow-bellied sapsucker (*Sphyrapicus varius*), chestnut-backed chickadee (*Parus rufescens*), orange-crowned warbler (*Vermivora celata*), and Oregon junco (*Junco oregonus*).

Along the lower Stikine River (and four other large mainland rivers, the Alsek, Chilcat, Taku, and Unuk) (see Swarth, 1911, 1922, and Jewett, 1943), there is a special sub-climax association—cottonwood (*Populus trichocarpa*), willow (*Salix* sp.), red alder, and devil's club. It is almost continuous along the banks and covers practically all the islands for the thirty miles of winding river channels from the British Columbia-Alaska boundary to the river mouth. In the most advanced sub-climax communities there are dense stands of large cottonwoods, 40 to 60 feet tall, with a heavy underbrush of willow, devil's club, and red alder, with here and there a Sitka spruce sapling. The common summer land birds are: ruffed grouse (*Bonasa umbellus*), wood pewee (*Contopus virens*), hermit thrush (*Hylocichla guttata*), russet olive-backed thrush (*Hylocichla ustulata*), American robin (*Turdus migra-*

torius), yellow warbler (*Dendroica petechia*), myrtle warbler (*Dendroica coronata*), warbling vireo (*Vireo gilvus*), and song sparrow (*Melospiza melodia*). Three of these species (ruffed grouse, wood pewee, and warbling vireo) occur in southeastern Alaska only in this association. The western tanager (*Piranga ludoviciana*) has been reported only from the lower Sitkine and Chickamin rivers within the territory of Alaska (Swarth, 1911, and Webster, 1950). The redstart (*Setophaga ruticilla*) occurs along the lower Stikine, but nowhere else in the territory (Webster, 1950). A very evident difference between this association and the rest of southeastern Alaska is the replacement of the black-tailed deer (*Odocoileus hemionus*) by the moose (*Alces americanus*).

HUDSONIAN ZONE. 1,500 TO 2,500 FEET

The intermediate altitudinal belt (Subalpine Forest, or Tundra-Coniferous Forest ecotone) has a vertical range of, usually, 1,000 feet. On the western side of Baranof and Chicagof Islands this is usually from 1,500 to 2,500 feet, but the proximity of glaciers and the direction of slope and shadow make these limits vary considerably. On Wrangell Island the lower boundary is at about 1,800 feet and the upper at 2,800 feet. On the mainland near Juneau and Wrangell, away from glaciers, the limits are at about 1,600 and 2,800 feet.

Climax communities of this zone are forests of alpine hemlock (*Tsuga mertensiana*) and Alaska cedar, ranging in height from 30 to 40 feet at the lower edge to scrubby bushes at the upper edge. There is also a little prostrate juniper (*Juniperus sibiricus* var. *nana*), western mountain ash (*Sorbus sitchensis*), and, on the mainland only, alpine fir (*Abies lasiocarpa*) and dwarf birch (*Betula glandulosa*). Sitka alder, with tundra blueberry (*Vaccinium uliginosum*) and copper bush (*Cladothamnus pyrolaeiflorus*), covers extensive areas of the steep slopes with a sub-climax of dense brush. The boggy soil sub-climax includes a few lodgepole pines, but more often tundra blueberry is succeeded by alpine hemlock. The common breeding birds are: willow ptarmigan (*Lagopus lagopus*) (upper edge only), ruby-crowned kinglet (*Regulus calendula*), pileolated warbler (*Wilsonia pusilla*), pine grosbeak (*Pinicola enucleator*), and Oregon junco (*Junco oreganus*). The common redpoll (*Acanthus flammea*) and golden-crowned sparrow (*Zonotrichia coronata*) are sparse along the mainland. The ringed (semipalmated) plover (*Charadrius hiaticula*) breeds only in sea level Hudsonian surroundings, near mainland glaciers (Bailey, 1927; Shortt, 1949; Jewett, 1942). Several other species, mostly shore and water birds, breed in this district only in the Hudsonian areas near the northern edge, at Situk, Glacier Bay, or White Pass (Bishop, 1901; Grinnell, 1909; Bailey, 1927; Shortt, 1939). It is suggested that their distribution on this coast is influenced more by spatial than ecologic factors. North of Cape Fairweather, it should be noted, the western hemlock-Sitka spruce forest is confined to island-like stands, as at Yakutat.

Ecology near sea level glaciers presents a problem particularly complicated by the rapidity of glacial retreat. Cooper (1939) estimated that the glaciers in Glacier Bay were retreating one-half to two-thirds of a mile per year. (The glaciers in LeConte Bay and along the lower Stikine have been retreating somewhat more slowly, perhaps one-tenth mile per year.) I found, in LeConte Bay, that the land birds in the sea level alpine hemlock-Sitka spruce forests were, like the trees, a mixture of high altitude and low altitude species.

ARCTIC-ALPINE ZONE. ABOVE 2,500 FEET

The Arctic zone (Tundra) consists of a series of islands formed by the higher peaks, together with glacial strips extending downward, all the way to salt water on the mainland in some cases. The altitudinal range, away from glaciers, is from 2,500 or 3,000 feet to the mountain tops—4,700 feet on the islands (Mt. Annahootz, Baranof Island), and to 15,300 feet on the mainland (Mt. Fairweather). I have never climbed above 4,500 feet myself, but the permanent ice cap seems to occupy all altitudes above 5,500 or 7,000 feet. The land above 2,500 feet is never anywhere near level; usually the slope is 45 degrees or more and the ridge-tops knife-edged, for this zone is above the rounded slopes which were overridden by Pleistocene glaciers.

Most of the vegetation is annuals, sedges, and grasses, but among the low shrubs are willows, dwarf birch, heathers (*Cassiope Mertensiana*, *Harrimanella stellariana*, *Phyllodoce glanduliflora*), and alpine hemlock. The breeding birds are the rock ptarmigan (*Lagopus mutus*), willow ptarmigan (*L. lagopus*), white-tailed ptarmigan (*L. leucurus*) (mainland only), water pipit (*Anthus spinoletta*), gray-crowned rosy finch (Hepburn's) (*Leucosticte tephrocotis*), and savannah sparrow (*Passerculus sandwichensis*). Beside the mainland glaciers at sea level only are found the short-billed common gull (*Larus canus brachyrhynchus*), Arctic tern (*Sterna paradisaea*), and snow bunting (*Plectrophenax nivalis*). Two species of water birds—Arctic loon (*Gavia arctica*) and Kittlitz murrelet (*Brachyramphus brevirostris*)—are arctic in habitat, being found only in ice-jammed fjords in summer, but their nests in this region have not been found. Mammals of wide distribution in southeastern Alaska, and largely confined to this zone, are the pika (*Ochotona*), marmot (*Marmota*), and mountain goat (*Oreamnos americanus*).

LITERATURE CITED

- BAILEY, A. M. 1927. Notes on the birds of southeastern Alaska. *Auk*, 44: 1-23, 184-205, 351-67.
 BISHOP, L. B. 1900. Birds of the Yukon Region, with notes on other species. *Biol. Survey, North Amer. Fauna*, 19: 47-96.
 BROOKS, A. 1923. Notes on the birds of Porcher Island, B.C. *Auk*, 40: 217-24.
 BROOKS, A., and H. S. SWARTH. 1925. A distributional list of the birds of British Columbia. *Pacific Coast Avif.*, 17: 1-158.
 COOPER, W. S. 1939. A fourth expedition to Glacier Bay, Alaska. *Ecology*, 20: 130-55.
 GRINNELL, J. 1909. Birds and Mammals of the 1907 Alexander Expedition to southeastern Alaska. *Univ. of Calif. Publ. Zool.*, 5: 171-264.
 JEWETT, S. G. 1943. Bird notes from southeastern Alaska. *Murrelet*, 23: 67-75.
 HEINTZELMAN, B. F. 1949. Forests of Alaska. *Yearbook of Agriculture*, 1949: 361-72.
 MUNRO, J. A., and I. McT. COWAN. 1947. A review of the bird fauna of British Columbia. 1-285. (Victoria, B.C., Prov. Mus.)
 OSGOOD, W. H. 1900. General account of the region and mammals of the Yukon region. *Biol. Survey, North Amer. Fauna*, 19: 1-46.
 ———. 1901. Natural history of the Queen Charlotte Islands, British Columbia. *Biol. Survey, North Amer. Fauna*, 21: 1-50.
 SHARPLES, A. W. 1938. *Alaska Wild Flowers*. 1-156. (Palo Alto, Stanford Univ. Press.)
 SHORTT, T. M. 1939. The summer birds of Yakutat Bay, Alaska. *Contrib. Royal Ont. Mus. Zool.*, 7: 9-172.
 SWARTH, H. S. 1911. Birds and mammals of the 1909 Alexander Alaska Expedition. *Univ. Calif. Publ. Zool.*, 7: 9-172.
 ———. 1922. Birds and mammals of the Stikine River region of northern British Columbia and southeastern Alaska. *Univ. Calif. Publ. Zool.*, 24: 125-314.
 WEBSTER, J. D. 1950. Notes on the birds of Wrangell and vicinity, southeastern Alaska. *Condor*, 52: 32-58.

Hanover College
 Hanover, Indiana

SOME NOTES ON THE BIRDS OF THE SAN JUAN ISLANDS

WILLIAM GOODGE

During the summer of 1948, from June 28 to August 21, Miss Zella McMannama and the writer made rather extensive observations of the bird life of the San Juan Island area, while in attendance at the University of Washington Oceanographic Laboratories near Friday Harbor on San Juan Island. Most of the observations of land birds were restricted to San Juan Island, but a number of boat trips provided an opportunity to observe marine birds in all of the major water courses of the Islands. Several visits were made to some of the smaller islands and rocks which are the breeding grounds of a number of water birds. Additional records were obtained by revisiting False Bay and Sportsmans Lake on San Juan Island on August 13 and 14, 1949. Dates refer to the summer of 1948, unless 1949 is specifically mentioned.

An extensive paper by Miller, Lumley, and Hall (*Murrelet*, 16: 51-65, 1935) included notes on the birds of the San Juan Islands based on the personal observations of the authors over a period of several years, and also all known records by previous observers. This paper treated rather extensively the geography, ecology, and early ornithological investigations of the area. It might be repeated that because of their isolation, and a climate which is quite different from that of the rest of western Washington, the San Juan Islands have been of special interest to the naturalist. The majority of the islands are dry and rocky, with precipitous shores broken by numerous fjord-like inlets. There are several large islands, but scattered about them are numerous smaller islands, only a few acres in extent. One region of particular interest is the west side of San Juan Island, with the dry grassy slopes of Mount Dallas rising from the water to an elevation of over 1,000 feet. Scattered groves of oaks (*Quercus garryana*) and open grassy areas give this part of the island an appearance similar to the coast of southern Oregon. The Oceanographic Laboratories are located on the east side of San Juan Island where more moisture has resulted in a comparatively heavy growth of trees and shrubs. Another interesting spot on the island is False Bay, a large, very shallow and muddy bay visited by shore birds. Sportsmans Lake, in the center of the island, is a small body of fresh water.

Our notes are intended to supplement the work of Miller, Lumley, and Hall. Of the 97 species observed by us only those are listed below which are new to the area, or which were formerly based on sight records and for which we have specimens, or those which show a change of status since 1935. Species marked * have not previously been reported from the Islands. The notes in quotation marks refer to the comments of Miller, Lumley, and Hall.

Western Grebe (*Aechmophorus occidentalis*). Two noted near Lopez Pass, August 16. "Winter resident, September to June."

***Fork-tailed Petrel** (*Oceanodroma furcata*). Three were observed with dark shearwaters off the south end of San Juan Island, August 9. The day was stormy, and the birds were resting on the water, permitting a close approach.

Double-crested Cormorant (*Phalacrocorax auritus*). Not common in the Islands. Noted on Flower Island and Point Disney, Waldron Island.

Brandt's Cormorant (*Phalacrocorax penicillatus*). Noted on Point Disney. A large number of immature birds were seen on Colville Island, where about 200 empty nests constructed with sticks were found. In 1949 Miss McMannama established that these nests were made by this species, although they are not "supposed" to use sticks. "Apparently breeds sparingly."

Common Mallard (*Anas platyrhynchos*). One found nesting on Low Island, June 21. This is a small rock less than 100 yards long. Grass and cactus are practically the only plant life. This species was abundant on Sportsmans Lake, San Juan Island, August 14, 1949.

American Pintail (*Anas acuta*). Several on Sportsmans Lake, August 14, 1949, constitute an early record.

Green-winged Teal (*Anas carolinensis*). Two on Sportsmans Lake, August 14, 1949, constitute an early record.

Blue-winged Teal (*Anas discors*). At least one male and one female were seen on Sportsmans Lake, August 14, 1949.

Greater Scaup (*Aythya marila*). Several noted on Griffin Bay, San Juan Island, August 2, were early. "Common in winter."

American Coot (*Fulica americana*). About 75 to 100 were seen on Sportsmans Lake, August 14, 1949. Two downy young and one immature bird were noted.

Semipalmated Plover (*Charadrius hiaticula*). Six were seen at False Bay, August 15, and one immature bird was collected.

Surf-bird (*Aphriza virgata*). Two were seen on Bare Island, July 15, in company with Black Turnstones (*Arenaria melanocephala*). Two adults were collected on August 12, and an immature on August 19. Included by Miller, Lumley, and Hall on the basis of a specimen collected in 1858 on Orcas Island by David Lyall.

Spotted Sandpiper (*Actitis macularia*). One seen at Blakely Lagoon, Blakely Island, July 22. "Migrant and possibly summer resident."

Western Sandpiper (*Ereunetes mauri*). Several were collected during the summer of 1948.

Greater Yellow-legs (*Totanus melanoleucus*). One individual was seen in a wet meadow near Friday Harbor, July 6, and three at False Bay, August 15, 1948. Four were seen at False Bay, August 13, 1949.

Sabine's Gull (*Xema sabini*). Two were seen off the south end of San Juan Island, August 9, 1948. The distinctive characteristics of this species were easily seen. In recent years this uncommon fall visitor has been seen more frequently, and was taken off Whidbey Island by Walter W. Dalquest in 1934 and 1936.

Common Murre (*Uria aalge*). Fairly common especially in San Juan Channel and the Strait of Juan de Fuca. First noted on July 19. "Occasionally seen among the Islands."

Rhinoceros Auklet (*Cerorhinca monocerata*). Seen on several occasions in San Juan Channel and the Strait, 30 or 40 on July 26. "Now rare or absent from the Islands."

Black Swift (*Nyctaleptes niger*). About a dozen were seen near the campus on July 8, five on Orcas Island near East Sound, July 29, and at Sportsmans Lake, August 15. Placed in hypothetical list by Miller, Lumley, and Hall.

Pileated Woodpecker (*Dryocopus pileatus*). Fairly common near the campus and on Brown Island. "Rare resident."

Hairy Woodpecker (*Dendrocopos villosus*). Fairly common near the campus and on Brown Island. Three were collected. "Uncommon resident."

Wood Pewee (*Contopus richardsonii*). The distinctive song of this species was heard near the campus. Since it was placed in the hypothetical list by Miller, Lumley, and Hall, we considered it justifiable to include this tenuous evidence.

Horned Lark (*Eremophila alpestris*). Seen at Cattle Point, San Juan Island.

House Wren (*Troglodytes aedon parkmanni*). Fairly common breeder near the campus and on Mount Dallas. Specimens were collected on July 4 and 11. This species is noticeably more abundant here than on the mainland.

Rock Wren (*Salpinctes obsoletus obsoletus*). This species was first discovered by Dr. Miller on Mount Dallas in 1936, and a specimen collected on August 22 (Washington State Museum No 10862, male). They were quite numerous in 1948 at this one locality, but their status at other times of the year is not known. The dry, rocky slopes of Mount Dallas are certainly the type of territory the rock wren prefers, but it is surprising that they would establish a colony so far outside their normal breeding range.

Hutton's Vireo (*Vireo huttoni*). This species is tentatively placed in the list on the basis of one heard on the campus on July 28, 1948.

Yellow Warbler (*Dendroica petechia*). Uncommon. Noted near Friday Harbor. "Common summer resident."

House Sparrow (*Passer domesticus*). Flocks noted in Friday Harbor, near the docks, apparently have spread to the Islands since 1935, as Miller, Lumley, and Hall placed it in the hypothetical list.

Western Meadowlark (*Sturnella neglecta*). Fairly common in the open parts of San Juan Island; common in the vicinity of Mount Dallas.

Washington State Museum
University of Washington
Seattle, Washington

ADDITIONAL NOTES ON THE BIRDS OF THE SAN JUAN ISLANDS

ZELLA McMANNAMA

During my research in the San Juan Islands in the summer of 1949 I spent approximately six weeks at Davis Bay, Lopez Island. My study was primarily concerned with the life history of the glaucous-winged gull (*Larus glaucescens*), but I also was able to make a few observations on the other birds of the area. In addition, during banding operations, I was able to visit other islands of the group, particularly Smith, in the Strait of Juan de Fuca, and Puffin Island. The following list of birds supplements the 1948 observations of William Goodge and myself, reported elsewhere in this number of *The Murrelet*. Species marked * are first records for the Islands. Where a species, formerly listed as a sight record, was collected, it is included. Some indicate a change in status since Miller, Lumley, and Hall published their list (*Murrelet*, 16: 51-65, 1935). Quotations following remarks are from that work.

***American Bittern** (*Botaurus lentiginosus*). While living at Davis Bay I was shown an old and mouldy skin of a bird of this species, which had been shot accidentally during the pheasant season a few years before. There was no doubt of the identity of the skin. This appears to constitute a new record for the Islands.

Black Oyster-catcher (*Haematopus bachmani*). Two of these striking birds were seen flying across Davis Bay on July 1. "Now rare or absent."

***Ruddy Turnstone** (*Arenaria interpres morinella*). An adult and an immature were seen on Smith Island, July 19.

Hudsonian Curlew (*Numenius phaeopus hudsonicus*). Three were seen at Davis Bay, August 8. One collected the following day is the first autumn specimen.

***Wandering Tattler** (*Heteroscelus incanous*). One seen at Smith Island on July 19. In hypothetical list of Miller, Lumley, and Hall.

Greater Yellow-legs (*Totanus melanoleucus*). One of three was collected at Davis Bay on August 9.

***Parasitic Jaeger** (*Stercorarius parasiticus*). One was seen at Deer Harbor, Orcas Island, September 23. In hypothetical list of Miller, Lumley, and Hall.

***Ring-billed Gull** (*Larus delawarensis*). One juvenile was collected at Davis Bay about August 10.

Short-billed Gull (*Larus canus brachyrhynchus*). A yearling male and female were collected at Davis Bay on June 30. On July 12 a pair of adults, the female with a brood patch, was collected.

***Caspian Tern** (*Sterna caspia*). One adult in full plumage was seen at close range on June 18, at Davis Bay. The identification was unmistakable.

Marbled Murrelet (*Brachyrhamphus marmoratus*). Four birds were collected in Davis Bay during the summer. A juvenile, taken August 3, had the egg-tooth still adhering to the bill.

Saw-whet Owl (*Cryptoglaux acadica*). One was found dead on the road at the Oceanographic Laboratories at Friday Harbor, San Juan Island, on September 23. "None seen or heard in recent years."

***Horned Lark** (*Ereunophila alpestris*). Frequently seen and heard singing in the marshy pastures near Davis Bay.

Steller's Jay (*Cyanocitta stelleri*). Two were heard on Orcas Island, September 24. "... in 1935 it seems to have disappeared."

***American Raven** (*Corvus corax*). Three were seen on San Juan Island, July 20. I have also seen this species on Sinclair Island, but I have no definite dates for that locality.

Fox Sparrow (*Passerella iliaca*). As I was banding gulls on Puffin Island on July 23, I disturbed a bird of this species, which scolded me from the shrubbery on the crest of the island. "Probably occasional resident and breeder."

In addition to these 1949 observations, two others seem worthy of recording here.

*Black-bellied Plover (*Squatarola squatarola*). One male was collected on Sinclair Island on February 21, 1948. In the hypothetical list of Miller, Lumley, and Hall.

*Tree Swallow (*Iridoprocne bicolor*). One male was seen at Urban, Sinclair Island, on May 18, 1946. In the hypothetical list of Miller, Lumley, and Hall.

Department of Zoology
University of Washington
Seattle, Washington

GENERAL NOTES

Status of the European Starling in British Columbia.—Numerous notes and reports relative to the invasion of the European starling (*Sternus vulgaris vulgaris*) into Alberta and British Columbia have appeared from time to time and it is the object of this paper to consolidate these notes with special reference to the more recent British Columbia reports.

Apparently starlings were first observed about Bradenbury, Alberta, in May, 1938 (Houston, *Can. Field Nat.*, 63: 235), where it is stated that the starlings were year-around residents. Other starlings were recorded each year from 1941 to 1947. Some of these starlings wintered, while others came as migrants. Several pairs nested in purple martin nesting holes in trees in the Sheehy district in 1944.

Two starlings were seen on June 14, 1948, by James Grant (*Can. Field Nat.*, 63: 117), who states that these birds were seen in the buffalo enclosure in Banff and refers to reports of others having seen starlings in the same district.

Four starlings were collected by A. J. Braun from a flock of eight on January 15, 1947, near Oliver, B.C. (Munro & Cowan, *Bird Fauna of British Columbia*, 1947, p. 186).

Two starlings were seen at Bella Coola, B.C., in March, 1947, by W. E. Pearce, and about December 1, 1948, Dr. J. E. Whiting of Bella Coola secured a specimen which had been found dead (*Can. Field Nat.*, 63: 165).

On April 30, 1948, Leo Jobin, Game Warden at Williams Lake, B.C., shot a male starling at 150 Mile House and later collected a female at William's Lake on November 26, 1948, where he had occasionally seen starlings during the two previous years. On November 20, 1949, Mr. Jobin saw four more starlings at Alkali Lake, B.C.

It is also reported that a flock of starlings was seen near Vernon, B.C., in mid-November, 1949.

A flock of four starlings was seen in mid-December, 1949, by Mr. Harling of Hall's Prairie, Surrey, B.C. More recently, January 11, 1950, a flock of five was seen by Dr. Ian McT. Cowan and companions on the dyke at the foot of Blundell Road on Lulu Island. These birds were exceedingly wild and would not permit close approach. A few days later Charles Guiget saw these starlings in the same place.

On January 20, 1950, P. W. Martin saw two starlings in a yard in the 4600 block 8th Ave. West, Vancouver, B.C.

All reports of first appearance of starlings in British Columbia are from very scattered places, great distances apart, and nearly all late fall and winter records.

John C. Shelford of Burns Lake, B.C., reports that he saw many starlings about

that part of the country from October into December, 1949, and that they appeared to withstand the cold and snow easily. He had also heard from many persons living in the lakes district stating that they had seen starlings. Mr. Shelford has recently seen starlings about Burns Lake and had seen a flock of over thirty at Wistaria, B.C.

It would now appear that the European starling is definitely a resident in British Columbia, but the only established breeding record is that of a pair which nested at Onward Ranch, nine miles south of William's Lake. It is quite probable that others have nested in this province.

While the starling has been observed at Bella Coola as early as 1947, it is only during the present fall and winter (1949-50) that they have been seen about the Fraser Valley and the southern British Columbia coast.

Frequently the first appearance of the European starling is in company with Brewer blackbirds.

Apparently the birds seen recently are in no way discouraged by the present severe weather and we may therefore expect a considerable increase in their numbers during the next few years, for they are rapid and persistent breeders.

The influx of starlings into British Columbia may be from two directions. First, from Alberta into the Cariboo and thence to Bella Coola. Second, from the states of Oregon and Washington via the Okanagan Valley, starlings having been reported in both states (*Murrelet*, 29: 28 and 29). It is therefore quite possible that the starlings seen this winter about Hall's Prairie and Vancouver came into this country by the southern route.—KENNETH RACEY, *Vancouver, B.C.*

Black Pigeon Hawk in Vancouver City.—A black pigeon hawk or merlin (*Falco columbarius suckleyi*) has spent the present winter (1949-50) about the city of Vancouver, B.C. It was first seen in early October near our house in the Kerrisdale District. On November 17 it came at 7:30 a.m. and remained perched on top of a nearby telephone pole for about ten minutes. It kept turning its head from side to side, looking over the surrounding trees. Then it preened its breast feathers, stretched, looked about again, and flew off in the direction where someone keeps several tame pigeons.

On December 22 it was seen flying past the front of the house at 9:10 a.m. and on January 8 it again came hunting along the rowan trees (*Sorbus acuparia*) with which the street is lined.

At 10:30 a.m. on February 5, when a flock of about twenty juncos, several robins, and purple finches were feeding nearby, the merlin flashed through the flock, missed its strike, made a right-about turn in front of the house, and flew down the street in pursuit of a junco. I could not see if it was successful or not. For several minutes after the merlin had departed, the various small birds remained very quietly perched in the protecting branches of the rowan trees, but soon recovered from their alarm and resumed feeding.

Again the merlin appeared at 8:30 a.m., February 8, and this time it came within a few feet of my window, so close indeed that I could distinctly see the color and pattern of the underside of its primaries as it turned and passed between our house and that of a neighbor and in the direction where several dozen robins were then feeding.

From its size and coloring the bird appeared to be an adult female.—KENNETH RACEY, *Vancouver, B.C.*

Golden-mantled Marmot in Northwestern Montana.—Records of the occurrence of *Marmota flaviventer nosophora* obtained during the summer of 1949 extend the known range of this species in northwestern Montana about 100 miles northward. The most northwestern stations at which these marmots previously have been recorded by Howell (*North American Fauna* No. 37, 1915) are Weeksville and Horse Plains (now called Plains) in Sanders County. We observed marmots in four areas north of these stations and made collections at three of the sites. All four areas were rocky outcroppings in yellow pine cover type at elevations of approximately 3,000 feet.

The northernmost station was on the north side of Pinkham Creek about four miles southwest of Rexford, Lincoln County. A rocky outcropping, extending in an east-westerly direction for several miles, provides what seems to be excellent marmot habitat. However, marmots were apparently rare since in two days only three individuals were observed of which one, a juvenile male, was collected on July 7. The coloration of this specimen is unusual since the top of the head is close to the auburn of Ridgway rather than the blackish brown of typical *nosophora*. Since the specimen came from an area where Howell (*loc. cit.*) suspected that *Marmota monax petrensis* probably occurred, it was thought advisable to compare it with specimens of this form of *monax*. We did this recently at the U. S. National Museum and there is no doubt that the specimen collected is a *flaviventer* marmot rather than a *monax*. The latter species remains unrecorded from Montana.

A second area in which marmots were found was a rocky outcropping on the north side of highway U. S. 2 about 10 miles west of Kalispell, Flathead County. Several individuals were seen here in June and July, and on August 7 two juveniles were obtained. Another area was some rocky outcroppings in a yellow pine forest four miles northwest of Fairview Guard Station in Lincoln County. Two specimens, a parous female and a sub-adult male, were obtained here on June 12. The fourth region where the species was seen was along the abandoned roadbed of the Great Northern Railroad on Wolf Creek, four miles east of its confluence with the Fisher River on June 11. No specimens were obtained in this region.

All specimens obtained are in the Montana State University Zoological Museum. We are indebted to Ben Bainen, Frank Bolles, and Ade Zajanc, local residents, who gave us assistance in locating the marmots.—PHILIP L. WRIGHT and CLINTON H. CONAWAY, *Montana State University Biological Station, Bigfork, and Department of Zoology, Montana State University, Missoula.*

Unusual Singing Perches of the Winter Wren.—There seems to be no mention of the singing heights of the winter wren (*Troglodytes troglodytes*) in the available North American literature, even though thousands of words have been written in description and analysis of its melodious song. The winter wren is a bird of the damp, shaded forest floor and dark canyon wall, and usually I have heard and seen it singing from perches close to the ground in these habitats.

On the morning of April 5, 1947, David B. Marshall and I heard and watched a winter wren singing from a height of about 28 feet in the upper branches of a young black cottonwood (*Populus trichocarpa*) that stood more or less in the open in typical cottonwood-willow river bottom habitat along the south side of the Columbia River at Portland, Oregon. The wren sang intermittently from this perch for approximately 30 minutes.

Winter wrens were singing on March 20, 1949, about one mile from the Pacific Ocean on the south side of the Gualala River in northwestern Sonoma County, California, in a mixed coniferous-broadleaf forest of redwood, Douglas fir, white fir, madrone, cascara, myrtle, tanbark oak, and red alder. One of the birds was singing at a height of approximately 30 feet in the upper limbs of a small redwood (*Sequoia sempervirens*) growing close to the trunk of a large, mature redwood.—FRED G. EVENDEN, JR., *Sacramento, California*.

Post-juvenile Molt of Steller's Jay in Captivity.—On May 27, 1949, I secured a fledgling jay (*Cyanocitta stelleri*) from the Arid Transition Zone in the Tumwater Canyon area, about five miles above Leavenworth, Chelan County, Washington. The parent birds were collected, but since their characters appear to be intermediate between those of *C. s. stelleri* of the coast and *C. s. annectens* of the east side of the Cascade Mountains, I am not attempting to place them in any subspecific group. The young jay was successfully kept in captivity for some time, and detailed notes were made of its development. The post-juvenile molt differed somewhat from that of other passerines that have come under my observation.

At the time of capture the body and head plumage was dull gray. The remiges and rectrices were like those of the adult; the middle and greater coverts were dull blue, and the lesser coverts gray. The crest was developed, but there were no blue lines on the forehead. The mouth lining was vivid red, and there was a thick, pale yellow roll about the gape.

The bird began to fly very soon, although it was about three weeks before the tail reached full length. About two weeks after capture the mouth lining faded to flesh pink and the bird began to feed itself.

The following is a schedule of my observations:

July 12—A few bright blue feathers across the middle and down the sides of the breast, and among the lesser wing coverts

July 13—A few blue feathers above the heel joint and among the scapulars

July 14—Some deep gray feathers of adult texture across the upper back

July 15—Greater coverts being shed. Middle coverts coming in from proximally; deeper blue

July 17—Six to eight blue feathers on the rump; blue on sides of breast very extensive

July 24—A faulty secondary was shed

July 25—Another faulty secondary was shed

July 31—Blue showing anteriorly on forehead and on upper and under tail coverts; crest being molted

Aug. 13—Entire body well covered by first winter plumage; two shed secondaries renewed

Aug. 20—Head in full molt; almost no crest feathers

Aug. 24—Back of head naked, except for incoming pinfeathers. Forehead feathers, abraded away about August 20, were in sheaths

Sept. 4—Crest nearly fully developed; feathering of forehead proceeding well; back of head and throat nearly renewed

Sept. 17—Molt appeared complete; crest and back of head fully covered; forehead feathers restored

The post-juvenile molt, as studied in captivity, lasted approximately two months.

The molt began almost simultaneously at many points: on the breast, thighs, back, scapulars, rump, and wing coverts. The remiges and rectrices (except two defective secondaries) were not molted. All coverts except the primary coverts of the wing were renewed. The body molt required about one month, and was practically completed before the head molt began. This molt also required about one month. Feather growth was very rapid. Secondaries required approximately three weeks to grow out completely.

Unlike the molt observed in the American goldfinch (*Spinus tristis*) there were no areas, such as nape, rump, tail coverts, and belly, where juvenal feathers persisted. The molt of the wing coverts was relatively complete, whereas in the goldfinch these feathers are not replaced until spring.—ZELLA McMANNAMA, *Department of Zoology, University of Washington, Seattle*.

Fox Squirrels in Asotin County, Washington.—Walter W. Dalquest (*Mammals of Washington*, University of Kansas Publications, Museum of Natural History, 2: 1-444, April, 1948) lists the fox squirrel (*Sciurus niger*) only for the Seattle area in King County, Washington, where it was introduced from southeastern United States. Ernest S. Booth (Systematic Review of Land Mammals of Washington, unpublished thesis at the State College of Washington, 1947) gives the distribution of the fox squirrel in Washington as "found within the city of Seattle, King County, and possibly in other cities; introduced."

According to Steve Black, predator hunter for the Fish and Wildlife Service, Clarkston, Washington (personal letter, November 3, 1949), fox squirrels were introduced from the east to Asotin County, Washington, about 1915. Twelve pairs were liberated in all: some on the Halsey ranch on George Creek, some on Asotin Creek just above the town of Asotin, and a few about 10 miles farther up Asotin Creek.

This population has not increased or extended its range appreciably, it has, however, maintained itself and it is not uncommon to see fox squirrels along lower Asotin Creek and in the vicinity of the town of Asotin at the present time. Large cottonwoods (*Populus trichocarpa*) are common along the lower sections of these streams which drain portions of the Blue Mountains. They are used for the most part as den trees. Black walnuts (*Juglans nigra*) were introduced by early settlers in the area. They furnish some food for the squirrels but it is felt that a shortage of adequate foods for this species has restricted its spread.

There is one specimen, an adult female, collected by Raleigh Moreland, February 1, 1949, 10 miles west of Asotin, which is now in the Charles R. Conner Museum at the State College of Washington.—CHARLES F. YOCOM, *Zoology Department, State College of Washington, Pullman*.

NOTES FROM THE FIELD

Some Observations of Winter Waterfowl at Green Lake Refuge, Seattle, Washington.

—On November 23, 1949, I saw a beautiful European widgeon drake (*Mareca penelope*) near my duck-banding trap. The bird swam leisurely past me, and was so close that identification was certain. It was not accompanied by any other ducks, and I was not able to find it at the lake at any later date.

Early on the morning of December 2, 1949, a lesser snow goose (*Chen hyperborea hyperborea*), a dusky bird of the year, was found with a quantity of heavy oil smeared all over its breast feathers. Because of the reluctance of the bird to take flight, or escape to the open water, I was able to walk the goose into some brush and capture it with the help of a park employee. The bird was taken to the Woodland Park aviary nearby, where the keeper promised that the oil would be cleaned from the bird without harming it, and that it would be a welcome addition to the exhibit of live birds. This is the first wild snow goose I have ever noted at Green Lake, although pinioned ones have been given their freedom at the lake by game department officials in past years. All such released birds have since died.

During the period from November 5, 1949, to January 15, 1950, I was able to observe 17 species of wild ducks on the lake. Among the less common species for this lake, located in the heart of a residential district, were one male ring-necked duck (*Aythya collaris*) and a pair of gadwalls (*Anas strepera*) (drake and hen) on January 8. One wood duck hen (*Aix sponsa*) wintered at the lake with the mallards. A red plastic poultry band was noted on her left leg. Very likely she had escaped from a game farm. Her actions in coming close to those who offered food substantiated the guess as to her past history. —WEBSTER H. RANSOM, Seattle, Washington.

SOCIETY MEETINGS

APRIL, 1950.—A regional meeting was held at the Provincial Museum in Victoria, British Columbia, on April 29, 1950. The afternoon session was called to order at 2:00 p.m. by Regional Vice President Ian McT. Cowan.

Several members reported on their field observations.

The program consisted of the following talks: "Winter Behavior of Flocking Birds," by Winifred Sabine; "Distribution of the Albatross in the North Pacific," by Karl

Kenyon; "Effect of Orchard Sprays on Bird Populations," by Ian McT. Cowan.

Members and guests adjourned to dinner at the Strathcona Hotel.

At 8:30 p.m. members met at the Provincial Museum with members of the Victoria Natural History Society for a program which consisted of demonstrations of various museum techniques: reproduction of fish models by casting in wax, construction of insect models on a large scale, preparation of bird and mammal skins, and egg blowing. Dr. Carl then showed two motion picture films: "Birdlife on a Marsh," and "The Loon's Necklace."

On Sunday, transportation was arranged through the cooperation of the Victoria Natural History Society and members were taken on a field trip to observe shore and water birds, and the skylarks. The route had been planned by Mr. J. O. Clay to include beautiful gardens and points of interest. —MARGARET A. IVEY, Secretary.

MAY, 1950.—A regular meeting was held at Pacific Lutheran College, Tacoma, Washington, May 27, 1950 at 8:00 p.m.

The meeting was called to order by Vice President Gordon D. Alcorn.

The following were elected to membership: R. H. Mackay, Vancouver, B.C.; David A. Munroe, Vancouver, B.C.; H. W. Schnell, Seattle, Wash.; Charles J. Guiguet, Victoria, B.C.

The program consisted of a talk by Gordon D. Alcorn on "Ornithological Problems of the Northwest." Burton T. Ostenson talked on "Color Adaptations of Mammals on the Great Plains," illustrating it with colored slides.

The meeting was adjourned and the members and guests were served coffee and doughnuts. —MARGARET A. IVEY, Secretary.

COMMENTS AND NEWS

It is with regret we have to announce the death of two members of the Society. Dr. Louis B. Bishop died in Pasadena on April 3, 1950. Louis K. Lear died in Seattle on May 1, 1950.

Dr. Bishop joined the Society in 1927. He was nationally known as an ornithologist.

Mr. Lear, a banker and civic leader, joined the Society in 1932. He was a member of the King County (Washington) Game Commission from 1918 to 1926, president of the Washington State Association of County Game Commissioners for two terms, and for five years state chairman of Ducks, Unlimited.

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